## AMENDMENTS

### In the Claims:

1. (Currently Amended)  An image processing method for ~~forming~~ <u>printing</u> images on an image ~~forming~~ <u>printing</u> device based on a file stored in an image ~~forming~~ data transmission device using a portable terminal, said image ~~forming~~ data transmission device connected to a first internal network constructed inside a first firewall, said image ~~forming~~ <u>printing</u> device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

said portable terminal establishing a connection with said image ~~forming~~ data transmission device via said second internal network, said second firewall, said external network, said first firewall and said first internal network using a protocol which allows bi-directional connections between the first and second internal networks and the external network at said first firewall and said second firewall;

said portable terminal transmitting an image ~~forming~~ <u>printing</u> request for said <u>stored</u> file ~~stored in~~ <u>to</u> said image ~~forming~~ data transmission device ~~to said image forming data transmission device~~;

said image ~~forming~~ data transmission device receiving said image ~~forming~~ <u>printing</u> request ~~transmitted by said portable terminal~~ and preparing <u>a print job</u> ~~an image forming data~~ <u>to print images</u> ~~for~~ <u>associated with</u> said <u>stored</u> file according to said image ~~forming~~ <u>printing</u> request;

said image ~~forming~~ data transmission device establishing a connection with said file server via said first internal network, said first firewall, and said external network using a protocol, which allows connections only from the first internal network to the external network at said first firewall;

said image ~~forming~~ data transmission device uploading said prepared <u>print job</u> ~~image forming data~~ to said file server;

said image ~~forming~~ <u>printing</u> device establishing a connection with said file server via said second internal network, said second firewall, and said external network using a protocol, which allows connections only from the second internal network to the external network at said second firewall;

said image ~~forming~~ <u>printing</u> device downloading said <u>print job</u> ~~image-forming data~~ from said file server; and

said image ~~forming~~ <u>printing</u> device <u>printing images</u> ~~forming said image~~ based on said downloaded ~~image-forming~~ <u>printing job</u> data.


2. (Currently Amended)  An image processing method according to claim 1 further comprising:

said image ~~forming~~ data transmission device transmitting a storage location data indicating where said uploaded ~~image-forming data~~ <u>print job</u> is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said image ~~forming~~ data transmission device transmitted;

said portable terminal displaying said received storage location data; and

said image ~~forming~~ <u>printing</u> device receiving an entry of said storage location data;

wherein said image ~~forming~~ <u>printing</u> device downloads said ~~image-forming data~~ <u>print job</u> from the storage location on said file server based on said storage location data.


3. (Currently Amended)  An image processing method according to claim 1 further comprising:

said image ~~forming~~ data transmission device transmitting a storage location data indicating where said uploaded ~~image forming data~~ print job is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said image ~~forming~~ data transmission device transmitted;

said portable terminal transferring said received storage location data to said image ~~forming~~ printing device via said second internal network or a local communication circuit; and

said image ~~forming~~ printing device receiving said storage location data transferred by said portable terminal;

wherein said image ~~forming~~ printing device downloads said ~~image forming data~~ print job from the storage location on said file server based on said storage location data.

4. (Currently Amended) An image processing method according to claim 1 further comprising:

said file server transmitting a storage location data indicating where said ~~image forming data~~ print job uploaded by said image ~~forming~~ data transmission device is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said file server transmitted;

said portable terminal displaying said received storage location data; and

said image ~~forming~~ printing device receiving an entry of said storage location data;

wherein said image ~~forming~~ printing device downloads said ~~image forming data~~ print job from the storage location on said file server based on said storage location data.

5. (Currently Amended) An image processing method according to claim 1 further comprising between:

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said file server transmitting a storage location data indicating where said ~~image forming data~~ print job uploaded by said image ~~forming~~ data transmission device is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said file server transmitted;

said portable terminal transferring said received storage location data to said image ~~forming~~ printing device via said second internal network or a local communication circuit;

said image ~~forming~~ printing device receiving said storage location data transferred by said portable terminal;

wherein said image ~~forming~~ printing device downloads said ~~image forming data~~ print job from the storage location on said file server based on said storage location data.


6. (Currently Amended) An image processing method according to claim 1 wherein said image ~~forming~~ printing device is a printer ~~and said image forming data is a printing job~~.


7. (Currently Amended) An image processing method for forming an image on an image ~~forming~~ printing device based on a file stored in an image ~~forming~~ data transmission device using a portable terminal, said image ~~forming~~ data transmission device connected to a first internal network constructed inside a first firewall, said image ~~forming~~ printing device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

said portable terminal establishing a connection with said image ~~forming~~ data transmission device via a public network, a public network authenticating server connected to said first internal network, and said first internal network;

said portable terminal transmitting an image ~~forming~~ printing request for said file stored in said image ~~forming~~ data transmission device to said image ~~forming~~ data transmission device;

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said image ~~forming~~ data transmission device receiving said image ~~forming~~ <u>printing</u> request transmitted by said portable terminal and preparing an ~~image-forming-data~~ <u>print job</u> for said file according to said image ~~forming~~ <u>printing</u> request;

said image ~~forming~~ data transmission device establishing a connection with said file server via said first internal network, said first firewall, and said external network using a protocol, which allows connections only from the first internal network to the external network at said first firewall;

said image ~~forming~~ data transmission device uploads said prepared ~~image-forming-data~~ <u>print job</u> to said file server;

said image ~~forming~~ <u>printing</u> device establishing a connection with said file server via said second internal network, said second firewall, and said external network using a protocol, which allows connections only from the second network to the external network at said second firewall;

said image ~~forming~~ <u>printing</u> device downloading said ~~image-forming-data~~ <u>print job</u> from said file server; and

said image ~~forming~~ <u>printing</u> device forming said image based on said downloaded ~~image forming-data~~ <u>print job</u>.

8. (Currently Amended) An image processing method according to claim 7 further comprising:

said image ~~forming~~ data transmission device transmitting a storage location data indicating where said uploaded ~~image-forming-data~~ <u>print job</u> is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said image ~~forming~~ data transmission device transmitted;

said portable terminal displaying said received storage location data; and

said image ~~forming~~ <u>printing</u> device receiving an entry of said storage location data;

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wherein said image ~~forming~~ printing device downloads said ~~image forming data~~ print job from the storage location on said file server based on said storage location data.


9.  (Currently Amended)  An image processing method according to claim 7 further comprising:

said image ~~forming~~ data transmission device transmitting a storage location data indicating where said uploaded ~~image forming data~~ print job is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said image ~~forming~~ data transmission device transmitted;

said portable terminal transferring said received storage location data to said image ~~forming~~ printing device via said second internal network or a local communication circuit; and

said image ~~forming~~ printing device receiving said storage location data transferred by said portable terminal;

wherein said image ~~forming~~ printing device downloads said ~~image forming data~~ print job from the storage location on said file server based on said storage location data.


10.  (Currently Amended)  An image processing method according to claim 7 further comprising:

said file server transmitting a storage location data indicating where said ~~image forming data~~ print job uploaded by said image ~~forming~~ data transmission device is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said file server transmitted;

said portable terminal displaying said storage location data; and

said image ~~forming~~ printing device receiving an entry of said storage location data;

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wherein said image ~~forming~~ printing device downloads said ~~image-forming data~~ print job

from the storage location on said file server based on said storage location data.

11. (Currently Amended) An image processing method according to claim 7 further

comprising:

said file server transmitting a storage location data indicating where said ~~image-forming data~~

print job uploaded by said image ~~forming~~ data transmission device is stored on said file server to

said portable terminal;

said portable terminal receiving said storage location data which said file server transmitted;

said portable terminal transferring said received storage location data to said image ~~forming~~

printing device via said second internal network or a local communication circuit;

said image ~~forming~~ printing device receiving said storage location data transferred by said

portable terminal;

wherein said image ~~forming~~ printing device downloads said ~~image-forming data~~ print job

from the storage location on said file server based on said storage location data.

12. (Currently Amended) An image processing method according to claim 7 wherein said

image ~~forming~~ printing device is a printer ~~and said image-forming data is a printing job~~.

13. (Currently Amended) An image processing system for forming an image on an image

~~forming~~ printing device based on a file stored in an image ~~forming~~ data transmission device, using a

portable terminal, said image ~~forming~~ data transmission device connected to a first internal network

constructed inside a first firewall, said image ~~forming~~ printing device connected to a second internal

network constructed inside a second firewall, and a file server connected to an external network

constructed on the outside of said first firewall and said second firewall, wherein:

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said portable terminal comprises,

a first connection establisher to establish a connection with said image ~~forming~~ data transmission device via said second internal network, said second firewall, said external network, said first firewall and said first internal network using a protocol, which allows bi-directional connections between the first internal network and the external network at said first firewall and said second firewall, and

an image ~~forming~~ printing request transmitter to transmit an image ~~forming~~ printing request for said file stored in said image ~~forming~~ data transmission device to said image ~~forming~~ data transmission device;

said image ~~forming~~ data transmission device comprises,

an image ~~forming~~ printing request receiver to receive said image ~~forming~~ printing request from said portable terminal,

an ~~image forming data~~ print job preparer to prepare an ~~image forming data~~ print job for said file based on said image ~~forming~~ printing request received by said image ~~forming~~ printing request receiver,

a second connection establisher to establish a connection with said file server via said first internal network, said first firewall, and said external network using a protocol, which allows connections only from the first internal network to the external network at said first firewall, and

a ~~an image forming data~~ print job uploader to upload said ~~image forming data~~ print job prepared by said ~~image forming data~~ print job preparer to said file server; and

said image ~~forming~~ printing device comprises,

a third connection establisher to establish a connection with said file server via said second internal network, said second firewall, and said external network using a protocol, which allows connections only from the second internal network to the external network at said second firewall,

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a ~~an image forming data~~ print job downloader to download said ~~image forming data~~ print job from said file server, and

an image former to form said image based on said ~~image forming data~~ print job downloaded by said ~~image forming data~~ print job downloader.


14. (Currently Amended)  An image processing system according to claim 13 wherein said image ~~forming~~ printing device is a printer ~~and said image forming data is a printing job~~.


15. (Currently Amended)  An image processing system for forming an image on an image ~~forming~~ printing device based on a file stored in an image ~~forming~~ data transmission device, using a portable terminal, said image ~~forming~~ data transmission device connected to a first internal network constructed inside a first firewall, said image ~~forming~~ printing device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, wherein

said portable terminal comprises,

a first connection establisher to establish a connection with said image ~~forming~~ data transmission device via a public network, a public network authenticating server connected to said first internal network, and said first internal network, and

an image ~~forming~~ printing request transmitter to transmit an image ~~forming~~ printing request for said file stored in said image ~~forming~~ data transmission device to said image ~~forming~~ data transmission device;

said image ~~forming~~ data transmission device comprises,

an image ~~forming~~ printing request receiver to receive said image ~~forming~~ printing request from said portable terminal,

a ~~an image forming data~~ print job preparer to prepare ~~image forming data~~ a print job for said file based on said image ~~forming~~ printing request received by said image ~~forming~~ printing request receiving means,

a second connection establisher to establish a connection with said file server via said first internal network, said first firewall, and said external network using a protocol, which allows connections only from the first network to the external network at said first firewall, and

a ~~an image forming data~~ print job uploader to upload said ~~image forming data~~ print job prepared by said ~~image forming data~~ print job preparing means to said file server; and

said image ~~forming~~ printing device comprises,

a third connection establisher to establish a connection with said file server via said second internal network, said second firewall, and said external network using a protocol, which allows connections only from the second internal network to the external network at said second firewall,

a ~~an image forming data~~ print job downloader to download said ~~image forming data~~ print job from said file server, and

an image former to form said image based on said ~~image forming data~~ print job downloaded by said ~~image forming data~~ print job downloader.

16. (Currently Amended)  An image processing system according to claim 15 wherein said image ~~forming~~ printing device is a printer ~~and said image forming data is a printing job~~.

17. (Currently Amended)  A portable terminal for forming an image on an image ~~forming~~ printing device based on a file stored in an image ~~forming~~ data transmission device, using said portable terminal, said image ~~forming~~ data transmission device connected to a first internal network constructed inside a first firewall, said image ~~forming~~ printing device connected to a second internal

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network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

a connection establisher to establish a connection with said image ~~forming~~ data transmission device via said second internal network, said second firewall, said external network, said first firewall and said first internal network using a protocol, which allows bi-directional connections between the first network and the external network at said first firewall and said second firewall; and

an image ~~forming~~ printing request transmitter to transmit an image ~~forming~~ printing request for said file stored in said image ~~forming~~ data transmission device to said image ~~forming~~ data transmission device.

18. (Currently Amended) A portable terminal according to claim 17 further comprising:

a storage location data receiver to receive a storage location data indicating where a ~~an~~ ~~image forming data~~ print job for said file uploaded to said file server by said image ~~forming~~ data transmission device is located on said file server; and

a storage location data display to display said storage location data received by said storage location data receiver.

19. (Currently Amended) A portable terminal according to claim 17 further comprising:

a storage location data receiver to receive a storage location data indicating where ~~an image~~ ~~forming data~~ a print job for said file uploaded to said file server by said image ~~forming~~ data transmission device is located on said file server; and

a storage location data transferrer to transfer said storage location data received by said storage location data receiver via said second internal network or local communication circuit to said image ~~forming~~ printing device.

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20. (Currently Amended)  A portable terminal according to claim 17 wherein said image ~~forming~~ printing device is a printer and ~~said image forming data is a printing job~~.

21. (Currently Amended)  A portable terminal for forming an image on an image ~~forming~~ printing device based on a file stored in an image ~~forming~~ data transmission device, using said portable terminal, said image ~~forming~~ data transmission device connected to a first internal network constructed inside a first firewall, said image ~~forming~~ printing device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

a connection establisher to establish a connection with said image ~~forming~~ data transmission device via a public network, a public network authenticating server connected to said first internal network, and said first internal network; and

an image ~~forming~~ printing request transmitter to transmit an image ~~forming~~ printing request for said file stored in said image ~~forming~~ data transmission device to said image ~~forming~~ data transmission device.

22. (Currently Amended)  A portable terminal according to claim 21 further comprising:

a storage location data receiver to receive a storage location data indicating where ~~an image forming data~~ a print job for said file uploaded to said file server by said image ~~forming~~ data transmission device is located on said file server; and

a storage location data display to display said storage location data received by said storage location data receiving means.

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23. (Currently Amended)  A portable terminal according to claim 17 further comprising:

a storage location data receiver to receive a storage location data indicating where ~~an image forming data~~ a print job for said file uploaded to said file server by said image ~~forming~~ data transmission device is located on said file server; and

a storage location data transferrer to transfer said storage location data received by said storage location data receiving means via said second internal network or local communication circuit to said image ~~forming~~ printing device.

24. (Currently Amended)  A portable terminal according to claim 17 wherein said image ~~forming~~ printing device is a printer ~~and said image forming data is a printing job~~.

25. (Currently Amended)  An image ~~forming~~ data transmission device for forming an image on an image ~~forming~~ printing device based on a file stored in said image ~~forming~~ data transmission device, using a portable terminal, said image ~~forming~~ data transmission device connected to a first internal network constructed inside a first firewall, said image ~~forming~~ printing device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

a file storage to store said file;

an image ~~forming~~ printing request receiver to receive an image ~~forming~~ printing request for said file stored in said file storage means from said portable terminal;

~~an image forming data~~ a print job preparer to prepare ~~an image forming data~~ a print job for said file based on said image ~~forming~~ printing request received by said image ~~forming~~ printing request receiver;

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a connection establisher to establish a connection with said file server via said first internal network, said first firewall, and said external network using a protocol, which is allowed to make connections only from the first internal network to the external network at said first firewall; and

~~an image forming data~~ a print job uploader to upload said ~~image forming data~~ print job prepared by said ~~image forming data~~ print job preparing means to said file server.

26. (Currently Amended) An image ~~forming~~ data transmission device according to claim 25 further comprising a storage location data transmitter to transmit a storage location data indicating where said ~~image forming data~~ print job uploaded to said file server by said ~~image forming data~~ print job uploader is located on said file server to said portable terminal.

27. (Currently Amended) ~~An image forming data~~ A print job transmitting device according to claim 25 wherein said image ~~forming~~ printing device is a printer ~~and said image forming data is a printing job~~.

28. (Currently Amended) An image ~~forming~~ printing device for forming an image based on a file stored in an image ~~forming~~ data transmission device, using a portable terminal, said image ~~forming~~ data transmission device connected to a first internal network constructed inside a first firewall, said image ~~forming~~ printing device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

a connection establisher to establish a connection with said file server via said second internal network, said second firewall, and said external network using a protocol, which allows connections only from the second internal network to the external network at said second firewall;

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~~an image forming data~~ <u>a print job</u> downloader to download from said file server ~~an image forming data~~ <u>a print job</u> for said file uploaded by said image ~~forming~~ data transmission device to said file server; and

an image ~~forming~~ <u>printing</u> device to form said image based on said ~~image forming data~~ <u>print job</u> downloaded by said ~~image forming data~~ <u>print job</u> downloader.

29. (Currently Amended) An image ~~forming~~ <u>printing</u> device according to claim 28 further comprising a storage location data receiver to receive a storage location data indicating where said ~~image forming data~~ <u>print job</u> is located on said file server,

wherein said ~~image forming data~~ <u>print job</u> downloader downloads said ~~image forming data~~ <u>print job</u> from the storage location on said file server based on said storage location data received by said storage location data receiver.

30. (Currently Amended) An image ~~forming~~ <u>printing</u> device according to claim 28 further comprising a storage location data receiver to receive a storage location data indicating where said ~~image forming data~~ <u>print job</u> is located on said file server from said portable terminal via said second internal network or local communication circuit;

wherein said ~~image forming data~~ <u>print job</u> downloader downloads said ~~image forming data~~ <u>print job</u> from the storage location on said file server based on said storage location data received by said storage location data receiver.

31. (Currently Amended) An image ~~forming~~ <u>printing</u> device according to claim 28 wherein said image ~~forming~~ <u>printing</u> device is a printer ~~and said image forming data is a printing job~~.

32. (Currently Amended) A recording medium that stores a program to control a portable terminal for forming an image on an image ~~forming~~ printing device based on a file stored in an image ~~forming~~ data transmission device, using said portable terminal, said image ~~forming~~ data transmission device connected to a first internal network constructed inside a first firewall, said image ~~forming~~ printing device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, characterized in causing said portable terminal to execute:

establishing a connection with said image ~~forming~~ data transmission device via said second internal network, said second firewall, said external network, said first firewall and said first internal network using a protocol, which allows bi-directional connections between the first internal network and the external network at said first firewall and said second firewall, and

transmitting an image ~~forming~~ printing request for said file stored in said image ~~forming~~ data transmission device to said image ~~forming~~ data transmission device.


33. (Canceled).


34. (Currently Amended) A recording medium that stores a program to control a portable terminal for forming an image on an image ~~forming~~ printing device based on a file stored in an image ~~forming~~ data transmission device, using said portable terminal, said image ~~forming~~ data transmission device connected to a first internal network constructed inside a first firewall, said image ~~forming~~ printing device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, characterized in causing said portable terminal to execute:

establishing a connection with said image ~~forming~~ data transmission device via a public

network, a public network authenticating server connected to said first internal network, and said

first internal network, and

transmitting an image ~~forming~~ printing request for said file stored in said image ~~forming~~

data transmission device to said image ~~forming~~ data transmission device.


35. (Canceled).


36. (Currently Amended)  A recording medium that stores a program to control an image

~~forming~~ data transmission device for forming an image on an image ~~forming~~ printing device based

on a file stored in said image ~~forming~~ data transmission device, using a portable terminal, said

image ~~forming~~ data transmission device connected to a first internal network constructed inside a

first firewall, said image ~~forming~~ printing device connected to a second internal network

constructed inside a second firewall, and a file server connected to an external network constructed

on the outside of said first firewall and said second firewall, characterized in causing said image

~~forming~~ data transmission device to execute:

receiving an image ~~forming~~ printing request for said file from said portable terminal;

preparing ~~an image-forming data~~ a print job for said file based on said image ~~forming~~

printing request;

establishing a connection with said file server via said first internal network, said first

firewall, and said external network using a protocol, which allows connections only from the first

internal network to the external network at said first firewall; and

uploading said ~~image forming data~~ print job to said file server.


37. (Canceled).

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38.  (Currently Amended)  A recording medium that stores a program to control an image ~~forming~~ printing device for forming an image based on a file stored in an image ~~forming~~ data transmission device, using a portable terminal, said image ~~forming~~ data transmission device connected to a first internal network constructed inside a first firewall, said image ~~forming~~ printing device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, characterized in causing said image ~~forming~~ printing device to execute:

establishing a connection with said file server via said second internal network, said second firewall and said external network using a protocol, which allows connections only from the second internal network to the external network at said second firewall;

downloading from said file server ~~an image forming data~~ a print job for said file uploaded by said image ~~forming~~ data transmission device to said file server; and

printing based on said ~~image forming data~~ print job.

39.  (Canceled).